



Job Number: SVMO-150543
Company: OXY USA, Inc.
Lease/Well: North Hobbs Unit GSA 951-18
Location: Lea County, NM
Rig Name: H&P #340
RKB: 16.5'
G.L. or M.S.L.: GL

State/Country: New Mexico/USA
Declination: 6.42°
Grid: East To Grid North
File name: W:\WINSER-12015SU-11OXYMCONORTH-1\GSA195118.SVY
Date/Time: 13-Jul-15 / 13:38
Curve Name: Surface - 1455' M.D. (SRG) (API 30-025-42484)

HOBBS OOD
OCT 16 2015
RECEIVED

MS Survey

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
Surface MD to 1455' MD is, to the best of
our knowledge a true and accurate account of
the well bore.
Daniel West 7/13/15
M/S Energy Services Date

OCT 22 2015

30-025-42484

W

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth FT	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16.50	.00	.00	16.50	.00	.00	.00	.00	.00	.00
100.00	1.38	105.54	99.99	-.27	.97	-.27	1.01	105.54	1.65
200.00	1.35	132.24	199.96	-1.38	3.00	-1.38	3.30	114.76	.63
300.00	.99	130.10	299.94	-2.73	4.53	-2.73	5.29	121.07	.36
400.00	1.16	120.00	399.93	-3.79	6.07	-3.79	7.16	122.01	.25
500.00	.95	128.41	499.91	-4.82	7.60	-4.82	9.00	122.37	.26
600.00	.86	130.41	599.90	-5.82	8.82	-5.82	10.56	123.41	.10
700.00	.90	155.50	699.89	-7.02	9.72	-7.02	11.99	125.84	.38
800.00	.81	137.40	799.87	-8.25	10.52	-8.25	13.37	128.12	.28
900.00	.65	159.03	899.87	-9.30	11.20	-9.30	14.56	129.71	.32
1000.00	.76	159.96	999.86	-10.46	11.63	-10.46	15.64	131.95	.11
1100.00	.45	159.38	1099.85	-11.45	12.00	-11.45	16.58	133.66	.31

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
1200.00	.51	181.78	1199.85	-12.26	12.12	-12.26	17.24	135.32	.20
1300.00	.59	183.59	1299.84	-13.22	12.08	-13.22	17.90	137.59	.08
1400.00	.67	193.36	1399.84	-14.30	11.91	-14.30	18.61	140.22	.13
Last Survey Depth Recorded									
1455.00	.52	158.88	1454.84	-14.85	11.92	-14.85	19.04	141.23	.69